NEU PRESS

Diş Hekimliği Dergisi

Vol: 8 No: 1 Year: 2026 | Research Article | e-ISSN: 2687-5535

https://doi.org/10.51122/neudentj.2026.178

Perception of Patient Safety Culture among Dentists, Nurses and Dental Assistants Working in a University Hospital

Ömer EKİCİ[1*] Osman TOGAY[2]

[1] Assoc. Prof., Afyonkarahisar Health Sciences University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, Afyonkarahisar, Türkiye, dromerekici@hotmail.com

[2] Ress. Ass., Afyonkarahisar Health Sciences University, Faculty of Dentistry, Department of Oral and Maxillofacial Surgery, Afyonkarahisar, Türkiye, osmantogay1@gmail.com

Article Info

Article History

Received: 17.10.2024
Accepted: 17.11.2025
Published: 28.04.2026

Keywords:
Dentistry,
Medical error,
Patient safety,
Patient safety culture.

ABSTRACT

Aim: The aim of this study is to evaluate the perceptions and attitudes of dentists, nurses and dental assistants working in a university hospital regarding patient safety.

Material and Methods: This cross-sectional survey was conducted on dentists (n=75), and nurses /dental assistants (n=16) in a university hospital between January 1 and March 31, 2024. The Patient Safety Culture Hospital Survey was used as the data collection tool.

Results: In the study, 73.6% of the participants reported that they had not reported any errors/incidents in their units in the last 12 months, 25.30% reported only "1-2 incidents/errors" and 1.1% reported "3-5 incidents/errors". In the study, 2.2% of the participants also rated the patient safety rating of the hospital they worked at as "excellent", 28.6% as "very good" and 69.2% as "acceptable". When the participants' patient safety culture hospital survey scores were examined according to sub-dimensions, the sub-domains with the highest scores were "feedback and communication about errors (3.71±0.52)", "teamwork within units (3.67±0.51) and "organizational learning and continuous improvement (3.20±0.44)". The sub-domains with the lowest scores were "hospital interventions and change (2.10±0.35)", frequency of reporting errors (2.39±0.69) and "non-punitive response to errors (2.45±0.29). Participants' scale scores varied according to their occupational group and length of time working in the hospital.

Conclusion: The study findings revealed that the hospital's patient safety culture was insufficient and that areas needed improvement. Employees should be trained on patient safety, especially adverse event reporting.

Bir Üniversite Hastanesinde Çalışan Diş Hekimleri, Hemşireler ve Diş Hekimi Asistanları Arasında Hasta Güvenliği Kültürü Algısı

Makale Bilgisi

Makale Geçmişi

Geliş Tarihi: 17.10.2024
Kabul Tarihi: 17.11.2025
Yayın Tarihi: 28.04.2026

Anahtar Kelimeler:
Diş hekimliği,
Tıbbi hata,
Hasta güvenliği,
Hasta güvenliği kültürü.

ÖZET

Amaç: Bu çalışmanın amacı, bir üniversite hastanesinde çalışan diş hekimi, hemşire ve diş hekimi asistanlarının hasta güvenliğine ilişkin algı ve tutumlarını değerlendirmektir.

Gereç ve Yöntemler: Bu kesitsel anket, 1 Ocak - 31 Mart 2024 tarihleri arasında bir üniversite hastanesinde diş hekimleri (n=75) ve hemşireler/diş hekimi asistanları (n=16) üzerinde yürütülmüştür. Veri toplama aracı olarak Hasta Güvenliği Kültürü Hastane Anketi kullanılmıştır.

Bulgular: Çalışmada katılımcıların %73,6'sı son 12 ayda birimlerinde herhangi bir hata/olay bildirmediklerini, %25,30'u yalnızca "1-2 olay/hata" ve %1,1'i "3-5 olay/hata" bildirmiştir. Çalışmada katılımcıların %2,2'si çalıştıkları hastanenin hasta güvenliği derecelendirmesini "mükemmel", %28,6'sı "çok iyi" ve %69,2'si "kabul edilebilir" olarak değerlendirmiştir. Katılımcıların hasta güvenliği kültürü hastane anketi puanları alt boyutlara göre incelendiğinde, en yüksek puan alan alt alanlar "hatalar hakkında geri bildirim ve iletişim (3,71±0,52)", "birimler içinde ekip çalışması (3,67±0,51)" ve "örgütsel öğrenme ve sürekli iyileştirme (3,20±0,44)" olmuştur. En düşük puan alan alt alanlar ise "hastane müdahaleleri ve değişim (2,10±0,35)", hata raporlama sıklığı (2,39±0,69) ve "hatalara cezalandırıcı olmayan yanıt (2,45±0,29)" olmuştur. Katılımcıların ölçek puanları mesleki gruplarına ve hastanede çalışma sürelerine göre değişmiştir.

Sonuç: Çalışma bulguları hastanenin hasta güvenliği kültürünün yetersiz olduğunu ve bazı alanlarda iyileştirme yapılması gerektiğini ortaya koymuştur. Çalışanlar hasta güvenliği konusunda, özellikle de olumsuz olay raporlaması konusunda eğitilmelidir.

To cite this article: Ekici Ö, Togay O. Perception of Patient Safety Culture among Dentists, Nurses and Dental Assistants Working in a University Hospital. NEU Dent J. 2026;8:29-40. https://doi.org/10.51122/neudentj.2026.178

***Corresponding Author:** Ömer EKİCİ, dromerekici@hotmail.com

INTRODUCTION

Patient safety can be defined as preventing errors related to health services and eliminating or reducing patient damage caused by these errors.[1] This concept covers all precautions taken by health organizations and their workers to protect individuals from the harm that healthcare services may cause. Patient safety is the process of providing safer care to patients as a result of risk assessment in hospitals, management and identification of patient-related risks, reporting and analysis to reduce recurring risks, and implementation of developed solutions. Ensuring patient safety protects patients from possible damage by reducing errors that may occur during service delivery. In cases where errors cannot be prevented; problems such as development of complications, interruption of treatment, repetition of diagnosis and treatment procedures, increase in medical expenses, loss of trust in health workers, and negative impact on the institutional image may arise.[2]

The World Health Organization (WHO) 2019 Patient Safety Report states that approximately 134 million errors are made in hospitals each year, that these errors cause the death of 2.6 million people, and that 42 billion dollars are spent each year for these errors.[3] Studies conducted in the United States emphasize that medical errors, which directly affect patient safety, are the fifth leading cause of death.[4] It has been revealed that more than 10% of hospitalized patients in the UK (approximately 850,000 patients per year) experience adverse events, and that the rate of adverse events among hospitalized patients in Australia is 16.6%.[5] According to the WHO, one in every ten patients suffers serious harm due to medical errors, and approximately ten million people worldwide are injured or lose their lives each year due to preventable malpractice. In Turkey, official records on this subject are limitedly accessible, but it is stated that many people lose their lives or become disabled each year due to medical errors.[6] In our country, according to the Security Reporting System (GRS), which was established for healthcare institutions and employees to report the errors they encounter, 101,841 error reports were made in 2017.[7] In Turkey, on April 6, 2011, the "Communiqué on the Procedures and Principles for Ensuring and Protecting Patient and Employee Safety in Healthcare Institutions and Organizations"[8] was published, and then the "Regulation on Ensuring Patient and Employee Safety"[9] was published to include this communiqué, and studies on this subject gained momentum. Today, improvements and studies continue within the scope of this regulation in healthcare institutions.[10] It is widely accepted that a patient safety culture should be established in order to increase patient safety in healthcare institutions.[11]

Patient Safety Culture can be defined as "the product of an individual or group's values, attitudes, perceptions, abilities, and behaviors that determine the style and competence of a healthcare institution in patient safety management and its commitments in this area."[12] Patient safety culture includes what is important in the institution, how to behave regarding patient safety, value judgments, beliefs and rules.[13] By an alternative definition, patient safety culture is the institution's acceptance of patient safety as the highest priority and common value.[14] Methods that can be useful in improving patient safety are listed as reporting and reporting errors, conducting quality improvement studies and training, eliminating human factors such as fatigue, ensuring effective nurse-physician-patient communication, taking a proactive approach to errors, learning from errors, and improving the number and quality of personnel.[15] The support of management for the creation of a culture that prioritizes patient safety includes compliance with the rules, training, systematic reporting, sensitivity, care, communication based on mutual trust, employee participation and teamwork awareness. Innovation is needed to create a safety culture and the institution's top management must take on great responsibilities.[16]

The success of patient safety studies will be possible by first increasing awareness of the magnitude of the problem and then developing a culture that will facilitate learning from mistakes and is not accusatory or punitive. Creating a patient safety culture is the responsibility of all employees within the institution and requires employees at every stage of health service provision to act consciously and responsibly.[17] All personnel, including doctors and nurses, have basic duties that include monitoring, reporting, analyzing, and improving incidents that pose a risk to the safety of patients and staff as well as delivering diagnosis, treatment, care, and other services without endangering the patient. In order to establish and improve the patient safety culture, it is recommended that the perceptions and attitudes of all employees regarding patient safety be measured and these measurements be repeated at intervals. The results obtained from the measurements can provide very useful information to managers and leaders in determining areas for improvement regarding patient safety. Although many studies have been conducted on the research of patient safety culture among physicians and nurses, [18–21] no study has been found in the literature regarding personnel working in the field of oral and dental health. The purpose of this study is to evaluate the perceptions and attitudes of dentists, nurses and dental assistants working in a university hospital regarding patient safety.

MATERIAL AND METHODS

Study design and ethics

This cross-sectional survey study was conducted at Afyonkarahisar Health Sciences University, Oral and Dental Health Application and Research Center between January 1 and March 31, 2024. The research universe consisted of dentists, nurses, and dental assistants working in different clinics of this center, and the aim of the study was not to determine a sample but to reach the entire universe. 89 dentists, 13 nurses, and 6 dental assistants working on the dates the research was conducted were included in the study. Approval was received from the Afyonkarahisar Health Sciences University, Clinical Research Ethics Committee for the research (decision date: 10.10.2023 and decision no: 2023/460) The study followed the rules of the Declaration of Helsinki. The research was conducted on a voluntary basis, and the participants were informed and their consents were obtained before the research. The survey was applied to the participants face to face and the survey was answered in 15-20 minutes.

Data collection

The “Hospital Survey on Patient Safety Culture (HSPSC)”, which was created by the Agency for Research and Quality in Healthcare in 2004 and has proven validity and reliability, was used as the data collection tool in the study. In the study conducted by Sorra and Nieva, [22] the Cronbach alpha value for the sub-dimensions was found to be between 0.63-0.84. The Turkish adaptation of the survey was conducted by Bodur and Filiz, [20] and Cronbach alpha coefficients were determined to be above 0.50 (0.57-0.86) in eight of the 12 safety culture sub-domains. In this study, Cronbach alpha coefficients were found to be 0.60 and above (0.60-0.87) in all sub-domains of the survey.

The HSPSC consists of 42 items and 12 sub-domains. The sub-domains in the HGKHA, which is a five-point Likert type; (1) comprehensive perception of safety, (2) frequency of reporting errors, (3) teamwork among hospital units, (4) hospital interventions and change, (5) managerial expectations and safety development activities, (6) organizational learning and continuous improvement, (7) teamwork within units, (8) keeping communication open, (9) feedback and communication about errors, (10) non-punitive response to errors, (11) Staff provision, and (12) hospital management support for patient safety. The survey is a five-point Likert-type scale with

the following questions: "1=strongly disagree=never", "2=disagree=rarely", "3=neither agree nor disagree=sometimes", "4=agree=most of the time", "5=strongly agree=always". The survey also includes questions on sociodemographic characteristics and occupational information. The questions in items A5, A7, A8, A10, A12, A14, A16, A17, B3, B4, C6, F2, F3, F5, F6, F7, F9 and F11 in the survey are reverse-direction questions.

Statistical analysis

The survey data was analyzed with the SPSS-27 (SPSS Inc., Chicago, IL, USA) software. Descriptive statistics (mean, frequency, standard deviation), Unrelated samples t-test and On-way ANOVA were used in the evaluation of the data. Statistical significance was denoted by $p<0.05$.

RESULTS

Seventy five dentists between the ages of 23-40 (mean age: 28.10±4.35) and 16 nurses/dental assistants between the ages of 20-36 (mean age: 25.56) participated in the study. The participation rate was 84.26% for dentists and 84.21% for nurses/dental assistants. 59.3% of the participants were female and 70.3% were under the age of 30. 44% of the participants had worked in the profession for less than 3 years, and 64.8% had worked in the hospital for less than 3 years (Table 1).

Table 1: Socio-demographic characteristics of the participants and PSCHS total scores

		n	%
Age	20-30 years	64	70.3
	>30 years	27	29.7
Gender	Female	37	40.7
	Male	54	59.3
Marital status	Married	37	40.7
	Single	54	59.3
Profession	Dentists	75	82.4
	Nurse/Dental assistant	16	17.6
Years working in hospital	0-3 years	59	64.8
	>3 years	32	35.2
Years working in unit	0-3 years	62	68.1
	> 3 years	29	31.9
Years working in profession	0-3 years	40	44
	> 3 years	51	56

PSCHS: Patient Safety Culture Hospital Survey; n=number

When the HSPSC scores of the participants were examined, the highest score regarding the unit the participants worked in was A15: Patient safety is a priority principle rather than doing more work (4.09±0.88), and the highest score regarding managers was B2: Our managers take seriously the suggestions of employees to improve patient safety (3.46±0.79). The highest score related to communication was C3: We are informed about errors that occur in this unit (4.05±0.67), and the highest score related to the hospital was E10: Units work well together to provide the best care for patients (3.38±0.61) (Table 2).

When the participants' HSPSC scores were examined according to sub-dimensions, the sub-areas with the highest scores were feedback and communication about errors (3.71±0.52), teamwork within units (3.67±0.51), and organizational learning and continuous improvement (3.20±0.44). The sub-domains with the lowest scores were hospital interventions and change (2.10±0.35), frequency of reporting errors (2.39±0.69), and non-punitive response to error (2.45±0.29) (Table 3).

Table 2: Participants' Patient Safety Culture Hospital Survey Scores

Patient Safety Culture Hospital Survey	Mean± SD
A. The unit you work in	
1. The people working in this unit support each other.	3.71±0.76
2. The people working in this unit are sufficiently staffed to handle the workload.	3.51±0.95
3. When there is a lot of work that needs to be done urgently, we work together as a team.	3.47±0.73
4. The people working in this unit are respectful to each other.	4.06±0.81
5. The people working in this unit work longer than is optimal for patient care.	2.47±0.60
6. We actively participate in efforts to improve patient safety.	3.09±0.63
7. More temporary staff is employed in this unit than necessary.	2.41±0.59
8. The people feel that they will be blamed for the mistakes they make.	2.40±0.53
9. The mistakes made have led to positive changes in this department.	3.23±0.70
10. It is only by chance that more serious mistakes do not occur here.	1.79±0.62
11. When an area of work in the unit becomes too busy, others help.	3.42±0.74
12. When an incident is reported, the feeling is not that the incident is a problem, but that the person involved is being complained about.	2.49±0.50
13. After making changes to improve patient safety, we evaluate their effectiveness	3.29±0.69
14. When there is a lot to do and it needs to be done very quickly, we work in "crisis mode."	2.41±0.61
15. Patient safety is a priority over doing more work.	4.09±0.88
16. Employees are concerned that mistakes they make are being kept in their personal files.	2.47±0.52
17. There are problems with patient safety in this department.	2.01±0.64
18. The procedures and systems we implement are successful in preventing errors.	3.45±0.82
B. Your managers	
1. Our managers appreciate when they see a job done according to established patient safety procedures.	3.25±0.70
2. Our managers take seriously employee suggestions for improving patient safety.	3.46±0.79
3. Our managers want us to work faster, even if there is a loss of quality.	2.05±0.62
4. Our managers ignore patient safety problems that occur repeatedly.	1.67±0.59
C. Communication	
1. We are informed about changes made based on reported incidents.	3.62±0.78
2. Employees are free to speak up when they see something that could negatively impact patient care.	3.48±0.77
3. We are informed about errors that occur in this unit	4.05±0.67
4. Employees feel free to question their managers' decisions and actions.	2.64±0.87
5. In this unit, we discuss ways to prevent errors from happening again.	3.46±0.79
6. Employees are afraid to ask questions when something seems wrong	1.97±0.68
D. Frequency of reported incidents	
1. How often is it reported when an error is made but is noticed and corrected before it affects the patient?	2.47±0.94
2. How often is it reported when an error is made but does not have the potential to harm the patient?	2.15±0.81
3. How often is it reported when an error is made that has the potential to harm the patient but does not?	2.57±0.84
F. Your Hospital	
1. The hospital management provides a working environment that increases patient safety.	3.08±0.66
2. Hospital units do not work in harmony with each other.	2.51±0.50
3. When patients are transferred from one unit to another, some things are neglected, overlooked, and lost.	2.24±0.62
4. There is good cooperation between units, which requires working together.	2.96±0.76
5. Important information about patient care is often lost during shift changes.	1.94±0.63
6. Working with people from other departments is often frowned upon.	1.94±0.58
7. There are often problems in transferring information between units.	2.25±0.62
8. The activities of the management show that patient safety is a top priority.	2.93±0.55
9. The management only seems to be concerned with patient safety when there is an undesirable event.	2.48±0.58
10. The units work well together to provide the best care for patients.	3.38±0.61
11. Shift changes in this hospital are problematic for patients	1.98±0.62

Table 3: Participants' Patient Safety Culture Hospital Survey sub-dimension scores

	Min.	Max.	Mean	Standard deviation
1.Comprehensive perception of safety	2.00	3.75	2.83	0.37
2.Frequency of error reporting	1.00	3.67	2.39	0.69
3.Teamwork across hospital units	1.75	3.25	2.70	0.28
4.Hospital interventions and change	1.00	2.75	2.10	0.35
5.Managerial expectations and safety improvement activities	1.75	3.50	2.60	0.32
6.Organizational learning and continuous improvement	2.33	4.67	3.20	0.44
7.Teamwork within units	2.50	4.75	3.67	0.51
8.Keeping communication open	1.67	3.33	2.70	0.45
9.Feedback and communication about errors	2.67	5.00	3.71	0.52
10.Non-punitive response to error	2.00	3.00	2.45	0.29
11.Staff provision	1.75	3.50	2.70	0.36
12. Hospital management support for patient safety	2.33	3.33	2.83	0.27

When the HSPSC sub-dimension scores of the participants were compared according to their professions, the nurse/dental assistant group had significantly lower scores for the "Keeping communication open" and "staffing provision" sub-dimension scores than the dentists ($p<0.05$ and $p<0.001$, respectively). However, the nurse/dental assistant group had significantly higher scores for the "non-punitive response to error" and "support from hospital management for patient safety" sub-dimension scores than the dentists ($p<0.05$) (Table 4).

Table 4: Comparison of PSCHS subscale scores according to profession

	Dentist Mean±SD	Nurse/Dental assistant Mean±SD	P value
1.Comprehensive perception of safety	2.83±0.38	2.87±0.31	0.624
2.Frequency of error reporting	2.42±0.72	2.27±0.53	0.330
3.Teamwork across hospital units	2.72±0.30	2.62±0.15	0.234
4.Hospital interventions and change	2.10±0.37	2.10±0.28	0.978
5.Managerial expectations and safety improvement activities	2.64±0.34	2.46±0.17	0.057
6.Organizational learning and continuous improvement	3.22±0.47	3.12±0.23	0.411
7.Teamwork within units	3.65±0.52	3.75±0.42	0.462
8.Keeping communication open	2.75±0.44	2.47±0.42	0.030*
9.Feedback and communication about errors	3.67±0.53	3.89±0.43	0.089
10.Non-punitive response to error	2.41±0.29	2.64±0.25	0.004*
11.Staff provision	2.77±0.34	2.37±0.25	0.000**
12. Hospital management support for patient safety	2.80±0.26	2.97±0.25	0.023*

PSCHS: Patient Safety Culture Hospital Survey; SD: Standard deviation; *: $p<0.05$; **: $p<0.001$

In addition, when the HSPSC sub-dimension scores were compared according to the length of time the participants worked in the hospital, it was seen that the sub-dimension scores of "organizational learning and continuous development", "teamwork within units", "keeping communication open", and "feedback and communication about errors" of those who worked for more than 3 years were significantly higher than those who worked for 3 years or less ($p<0.05$) (Table 5).

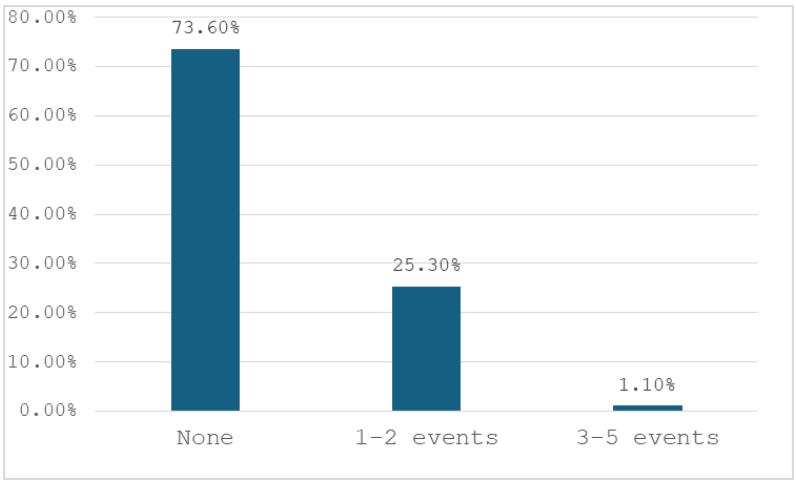
Table 5: Comparison of PSCHS subscale scores according to years of hospital work

	0-3 years (n=59) Mean±SD	>3 years (n=32) Mean±SD	P value
1.Comprehensive perception of safety	2.82±0.38	2.86±0.34	0.571
2.Frequency of error reporting	2.35±0.69	2.47±0.69	0.421
3.Teamwork across hospital units	2.69±0.30	2.71±0.25	0.696
4.Hospital interventions and change	2.13±0.36	2.04±0.33	0.229
5.Managerial expectations and safety improvement activities	2.61±0.36	2.59±0.23	0.731
6.Organizational learning and continuous improvement	3.12±0.42	3.35±0.44	0.024*
7.Teamwork within units	3.59±0.54	3.81±0.43	0.038*
8.Keeping communication open	2.63±0.47	2.83±0.37	0.031*
9.Feedback and communication about errors	3.59±0.50	3.93±0.48	0.002*
10.Non-punitive response to error	2.44±0.27	2.48±0.33	0.485
11.Staff provision	2.73±0.34	2.64±0.38	0.282
12. Hospital management support for patient safety	2.80±0.28	2.88±0.24	0.182

PSCHS: Patient Safety Culture Hospital Survey; SD: Standard deviation; n=number; *: $p<0.05$

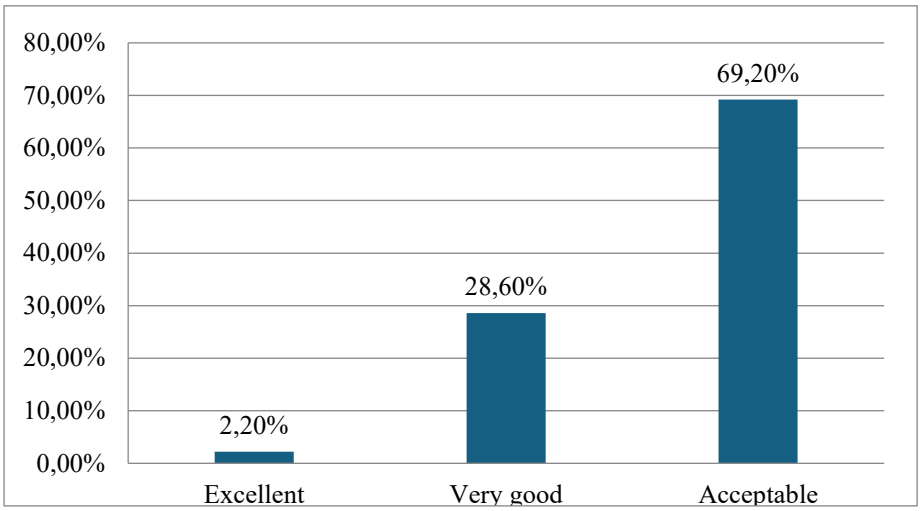
In the study, 73.6% of the participants reported that they had not reported any errors/incidents in their units in the last 12 months, 25.30% reported only "1-2 incidents/errors" and 1.1% reported "3-5 incidents/errors" (Figure 1).

Figure 1: Number of reported incidents/errors



In the study, 2.2% of the participants also rated the patient safety rating of the hospital they worked at as "excellent", 28.6% as "very good" and 69.2% as "acceptable" (Figure 2).

Figure 2: Hospital patient safety rating according to participants



DISCUSSION

Patient safety culture is a part of the organizational culture and consists of the attitudes, beliefs, perceptions and values of individuals in the organization.[11] Patient safety is the responsibility of all individuals working in the hospital. In this study, which evaluates the perceptions and attitudes of dentists, nurses and dental assistants working in an oral and dental health practice and research center regarding patient safety culture for the first time in the literature, it was determined that patient safety culture was not at an adequate level.

When the participants' HSPSC scores were examined according to sub-dimensions, the sub-domains with the highest scores were "feedback and communication about errors (3.71±0.52)", "teamwork within units (3.67±0.51)" and "organizational learning and continuous improvement (3.20±0.44)". The sub-domains with the lowest scores were "hospital interventions and change (2.10±0.35)", frequency of reporting errors (2.39±0.69) and "non-punitive response to errors (2.45±0.29)". In a study investigating the patient safety culture of healthcare personnel, it was seen that the "teamwork within units" dimension had the highest average with an average of 3.28, followed by the "organizational learning and continuous improvement" dimension with an average of 3.24.[23] In a study conducted in hospitals in Konya, the dimension of "teamwork within units" had the highest mean, while the dimensions of "frequency of error reporting" and "non-punitive response to error" were the dimensions with the lowest mean.[20] In a study comparing countries according to the results of a patient safety culture survey conducted in many hospitals in the Netherlands, Taiwan and the United States, the dimension of "teamwork within units" had the highest mean in all three countries, while the dimension of "teamwork between hospital units" had the lowest mean in the Netherlands, and "non-punitive response to error" had the lowest mean in Taiwan and the United States.[24] Although there are some differences between the dimensions with the lowest and highest mean in the survey in national and international studies, it is seen that they are generally similar to each other.

In the study, 73.6% of the participants reported that they had not reported any errors/incidents in their units in the last 12 months, while 25.30% reported only 1-2 incidents/errors. In this study, the fact that the majority of the participants reported that no error/incident report had been written in their units in the last 12 months, and the low mean positive responses to the frequency of error reporting and non-punitive response to errors sub-areas of the HSPSC survey are important indicators of a problem in the institution regarding the reporting of medical errors. Similar to our study results, studies conducted in Izmir and Antalya reported that 83.1% and

70% of the nurses working in university hospitals reported that they had not reported any errors/incidents in their units in the last 12 months, respectively.[18,19] In a study conducted on physicians and nurses in Konya, this rate was reported as 84.4%.[20] In a study conducted in the USA, it was stated that 49% of the nurses and physicians working in the operating room had not reported any incidents in the last twelve months. Similar results have been reported in other national and international studies.[21] Evans et al.'s study indicated that physicians and nurses do not receive feedback from managers, do not care about near misses, and do not report errors due to workload.[25] In a study examining the views of healthcare providers on reporting medical errors, it was understood that there is insufficient reporting due to reasons such as not being accepted or excluded by colleagues or being forced to admit to making a mistake in society.[26] It was stated that due to the inadequate patient safety culture in healthcare institutions in our country and the concern that the penalty system will be implemented in case of a mistake, employees are not willing to report errors due to reasons such as being punished, excluded, and having their careers negatively affected.[20] However, faulty medical practices are not only the fault of individuals; institutions also play a role and contribute to this, and therefore most errors originate from the system.[27] The systematic approach to be established to eliminate erroneous events occurring in hospitals should include; collecting and researching data on the subject, developing strategies against problems in the system, and creating a patient safety culture in the institution where errors are reported without fear or hesitation.[28–30] The fact that the rate of filling out incident reports is very low in both this study and other studies indicates that necessary measures should be taken to encourage staff to report. Managers or supervisors should be constructive, supportive and explanatory in terms of feedback on errors. Otherwise, the individual may hide the error they made, feel that it can be used against them and as a result, the errors may turn into greater harm.

In this study, the sub-dimensions "keeping communication open" and "providing staff" of the nurse/dental assistant group were significantly lower than those of dentists ($p<0.05$ and $p<0.001$, respectively). In order for oral and dental health services to be carried out without interruption, it is also important to provide sufficient support staff in addition to the number of doctors. Another problematic area for the nurse/dental assistant group is keeping communication open. Communication problems can often prevent teamwork and lead to medical errors. In creating an effective safety culture, it is important for employees to be able to communicate well with their own unit, other units, and upper management.[14,31] However, the sub-dimensions "Non-punitive response to error" and "Support from hospital management for patient safety" of dentists were significantly lower than those of the nurse/dental assistant group ($p<0.05$). Bognar stated that patient safety culture did not differ according to profession.[32] In another study conducted with physicians and nurses working in operating rooms, it was determined that nurses scored higher than physicians in the sub-dimensions "feedback and communication about errors" and "managerial expectations and factors for improving patient safety".[21] Mills et al. reported that the patient safety culture of operating room staff was better than that of clinical nurses.[33]

When the perceptions of healthcare personnel regarding the dimensions of patient safety culture were compared according to their length of service in the profession, it was observed that the sub-dimensions of "organizational learning and continuous development", "teamwork within units", "keeping communication open", and "feedback and communication about errors" of those who had worked for more than 3 years were significantly higher than those who had worked for 3 years or less ($p<0.05$). Similar to the findings of this study, a study reported that nurses with more than 10 years of service had a higher patient safety culture than nurses who had worked for 1-5 years.[34]

The findings of our study suggest that increasing service length may lead to increased communication and perceptions of institutional belonging. On the other hand, another study found that healthcare professionals with more than 15 years of service had lower mean scores on some of the sub-dimensions than those with less than 5 years.[35] The researchers explain this result with the thesis that emotional exhaustion, low job satisfaction, etc. may increase as the number of years working in the profession increases.[36]

In the study, 30.8% of the participants evaluated the patient safety degree as excellent or very good, while 69.20% evaluated it as acceptable. There were no participants who evaluated patient safety as weak or unsuccessful in the study. In a study conducted in Turkey, 37.8% of the nurses working in a university hospital evaluated the patient safety degree in the unit they worked in as very good and 43.3% as acceptable.[20] In another study, 15.9% of the healthcare personnel working in a public hospital evaluated the patient safety degree as excellent or very good, 25% as acceptable, and more than half (59.1%) as weak or unsuccessful.[23] In the study, the average patient safety degree score of the hospital was also found to be 2.83. This value is below the acceptable score of 3 points. In the study of Korkmazer et al., this score was found to be 2.68, similar to the result of this study.[23] In the study, the fact that the patient safety degree was not perceived as very good or excellent indicates that improvements should be made here.

This study was conducted in an oral and dental health application and research center in Turkey, and the results cannot be generalized to the entire country. Due to the small size of the study population, only the dentist and nurse/dental assistant groups were compared, and no comparison of occupational subgroups (nurse and dental assistant, faculty member and research assistant) could be made. Since the study findings are limited to scale questions, it does not allow for a cause-and-effect relationship to be established regarding patient safety. However, this study is the first study to evaluate the perception of patient safety culture among dentists, nurses and dental assistants working in oral and dental health services, and as stated in a bibliographic review, [37] the HSPSC Survey, which is the most frequent (42.4%) used data collection tool in studies measuring patient safety in Turkey, was used in this study.

CONCLUSION

In the hospital where the study was conducted, inadequacies were found in the patient safety culture and awareness of the employees. The fact that only one third of healthcare personnel evaluate the patient safety degree as very good or excellent and the average patient safety degree is 2.83 indicates that there are opportunities for improvement in this area. The low scores in the patient safety culture dimensions of “hospital interventions and change, frequency of reporting errors, non-punitive response to errors, management expectations and safety improvement activities, and keeping communication open” indicate the areas that hospital management should prioritize in developing a patient safety culture. In the hospital where the incident/error report notification rate of healthcare personnel is very low, training should be provided in this regard and encouraging, positive environments based on trust should be created. To create a patient safety culture, it is vital for the institution to allocate resources to patient safety, to determine high-risk activities and factors that may cause errors, to produce solutions at all levels in risky practices, to provide training to health professionals on errors according to the characteristics of the units they work into, to establish an effective error reporting system, to establish healthy communication between physicians, nurses, and patients, to ensure that all personnel takes an active role in patient safety practices to be carried out in the hospital and to take ownership of the issue, to create an environment where medical errors can be reported without fear and hesitation and are not punished.

Ethical Approval

Approval was received from the Afyonkarahisar Health Sciences University, Clinical Research Ethics Committee for the research (2023/460).

Financial Support

The authors declare that this study received no financial support.

Conflict of Interest

The authors deny any conflicts of interest related to this study.

Author Contributions

Design: ÖE, Data collection or access: ÖE, OT, Analysis and comments: ÖE, Literature search: ÖE, OT, Writing: ÖE, OT.

REFERENCES

1. Akalın HE. Yoğun bakım ünitelerinde hasta güvenliği. Turk J Intensive Care. 2005;5:141-6.
2. Yıldız D, Fidancı B, Ünver V, Kılıç H, Yava A, Tosun N. Views of Senior Nursing Students on Patient Safety. Gulhane Med J. 2013;55:269-75.
3. World Health Organization. Patient safety [Internet]. Geneva: WHO; 2019 [cited 2024 Jun 7]. Available from https://www.who.int/patientsafety/en/.
4. Çırpı F, Merih YD, Kocabey MY. Hasta güvenliğine yönelik hemşirelik uygulamalarının ve hemşirelerin bu konudaki görüşlerinin belirlenmesi. Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi. 2009;2:26-34.
5. Çakmakçı M. Hasta Güvenliği: Bir Paradigma Değişimi. Sağlık Düşüncesi ve Tıp Kult Derg. 2014;33:6-11.
6. Korkmaz O. Hemşirelerin hasta güvenliği konusunda yöneticilerin tutumunu algılayışı. Dokuz Eylul Univ Sos Bilim Enst Derg. 2012;14:91-112.
7. T.C. Sağlık Bakanlığı. Güvenlik Raporlama Sistemi 2017 Türkiye İstatistikleri. [cited 2024 July 13]. Available from https://www.saglikaktuel.com/d/file/28439,grs2017-sonpdf.pdf.
8. Resmi Gazete. Sağlık kurum ve kuruluşlarında hasta ve çalışan güvenliğinin sağlanması ve korunmasına ilişkin usul ve esaslar hakkında tebliğ [Internet]. Ankara: T.C. Resmi Gazete; 2009 [cited 2024 Jun 25]. Available from https://www.resmigazete.gov.tr/eskiler/2009/04/20090429-12.htm.
9. Resmi Gazete. Hasta ve çalışan güvenliğinin sağlanmasına dair yönetmelik [Internet]. Ankara: T.C. Resmi Gazete; 2011 [cited 2024 Jun 25]. Available from https://www.resmigazete.gov.tr/eskiler/2011/04/20110406-3.htm.
10. Ertürk C, Dönmez P, Özmen D. Manisa il merkezindeki hastanelerde görev yapan hemşirelerin hasta güvenliği kültürünün değerlendirilmesi. Ege Univ Hemşirelik Fak Derg. 2016;32:19-33.
11. Kaya S. Hasta güvenliği kültürü nedir ve nasıl geliştirilebilir? sağlık hizmetlerinde kalite. Akreditasyon ve Hasta Güvenliği Dergisi. 2009;1:32-4.
12. Çıraklı Ü, Çelik Y, Beylik U. Örgütsel faktörlerin sağlık ekiplerinin etkililiği ve ekip etkililiği bileşenleri üzerine etkisi: bir uygulama çalışması. Journal of Performance and Quality in Health. 2012;4:103-120.
13. Yönt GH. Hasta güvenliği kültürü. Ege Univ Hemşirelik Fak Derg. 2011;27:77-82.
14. Azami-Aghdash S, Ebadifard Azar F, Rezapour A, Azami A, et al. Patient safety culture in hospitals of Iran: a systematic review and meta-analysis. Med J Islam Repub Iran. 2015;29:251.
15. Silén-Lipponen M, Tossavainen K, Turunen H, Smith A. Potential errors and their prevention in operating room teamwork as experienced by Finnish, British and American nurses. Int J Nurs Pract. 2005;11:21-32.
16. Hellings J, Schrooten W, Klazinga N, Vleugels A. Challenging patient safety culture: survey results. Int J Health Care Qual Assur. 2007;20:620-32.
17. Kaissi A. An organizational approach to understanding patient safety and medical errors. Health Care Manag (Frederick). 2006;25:292-305.

18. Erkul M, Bilişli Y, Tüm NÖ. Hemşirelerde hasta güvenliği kültürü algısı: üniversite hastanesi örneği. J Acad Soc Sci. 2015;3:330-7.
19. Atan ŞÜ, Dönmez S, Duran ET. Üniversite hastanesinde çalışan hemşirelerde hasta güvenliği kültürünün incelenmesi. Florence Nightingale J Nurs. 2013;21:172-80.
20. Bodur S, Emel Filiz. Validity and reliability of Turkish version of "Hospital Survey on Patient Safety Culture" and perception of patient safety in public hospitals in Turkey. BMC Health Serv Res. 2010;10:28.
21. Scherer D, Fitzpatrick JJ. Perceptions of patient safety culture among physicians and RNs in the perioperative area. AORN J. 2008;87:163-75.
22. Sorra JS, Dyer N. Multilevel psychometric properties of the AHRQ hospital survey on patient safety culture. BMC Health Serv Res. 2010;10:199.
23. Korkmazer FAY, Ekingen E. Sağlık personeli hasta güvenliği kültürü algılarının değerlendirilmesine yönelik bir araştırma. Anemon Muş Alparslan Üni Sos Bil Derg. 2016;4:141-54.
24. Wagner C, Smits M, Sorra J, Huang CC. Assessing patient safety culture in hospitals across countries. Int J Qual Health Care. 2013;25:213-21.
25. Evans SM. Attitudes and barriers to incident reporting: a collaborative hospital study. Qual Saf Health Care. 2006;15:39-43.
26. Wolf ZR, Serembus JF, Smetzer J, Cohen H, Cohen M. Responses and concerns of healthcare providers to medication errors. Clin Nurse Spec. 2000;14:278-90.
27. Leape LL, Woods DD, Hatlie MJ, Kizer KW, et al. Promoting patient safety by preventing medical error. JAMA. 1998;280:1444-7.
28. Cooper MD. Towards a model of safety culture. Saf Sci. 2000;36:111-36.
29. Pizzi LT, Goldfarb NI, Nash DB. Promoting a culture of safety. In: Shojania KG, Duncan BW, McDonald KM, Wachter RM, editors. Making health care safer: a critical analysis of patient safety practices. Rockville (MD): Agency for Healthcare Research and Quality; 2001. p. 447-52.
30. Shojania KG, Duncan BW, McDonald KM, Wachter RM, Markowitz AJ. Making health care safer: a critical analysis of patient safety practices. Evid Rep Technol Assess (Full Rep). 2001;43:1-10.
31. Singer SJ. The culture of safety: results of an organization-wide survey in 15 California hospitals. Qual Saf Health Care. 2003;12:112-8.
32. Bognár A, Barach P, Johnson JK, Duncan JC, et al. Errors and the burden of errors: attitudes, perceptions, and the culture of safety in pediatric cardiac surgical teams. Ann Thorac Surg. 2008;85:1374-81.
33. Mills P, Neily J, Dunn E. Teamwork and communication in surgical teams: ımplications for patient safety. J Am Coll Surg. 2008;206:107-12.
34. Kim J, An K, Kim MK, Yoon SH. Nurses' perception of error reporting and patient safety culture in Korea. West J Nurs Res. 2007;29:827-44.
35. Karayurt Ö, Damar HT, Bilik Ö, Özdöker S, Duran M. Ameliyathanede hasta güvenliği kültürünün ve güvenli cerrahi kontrol listesinin kullanımının incelenmesi. Acıbadem Univ Saglik Bilim Derg. 2017;1:16-23.
36. Gürsoy AA, Çolak A, Danacı S, Çakar Y. Ameliyathane hemşirelerinde iş doyumu, anksiyete ve tükenmişlik: (Trabzon örneği). Hemşirelikte Araştırma Geliştirme Dergisi. 2007;9:28-37.
37. Bacaksız FE, Eskici GT, Uğuz G, Harmancı AK. Türkiye'de "hasta güvenliği" konusunda son on yılda (2008-2017) yayımlanan ulusal çalışmaların değerlendirilmesi: Bibliyografik bir inceleme. JAREN. 2020;6:523-37.